

**STATE OF ILLINOIS**  
**DEPARTMENT OF NATURAL RESOURCES**  
**OFFICE OF WATER RESOURCES**

**ROCKDALE DRAINAGE REPAIRS**

**ROCKDALE, ILLINOIS**

**WILL COUNTY**

**FR-424**

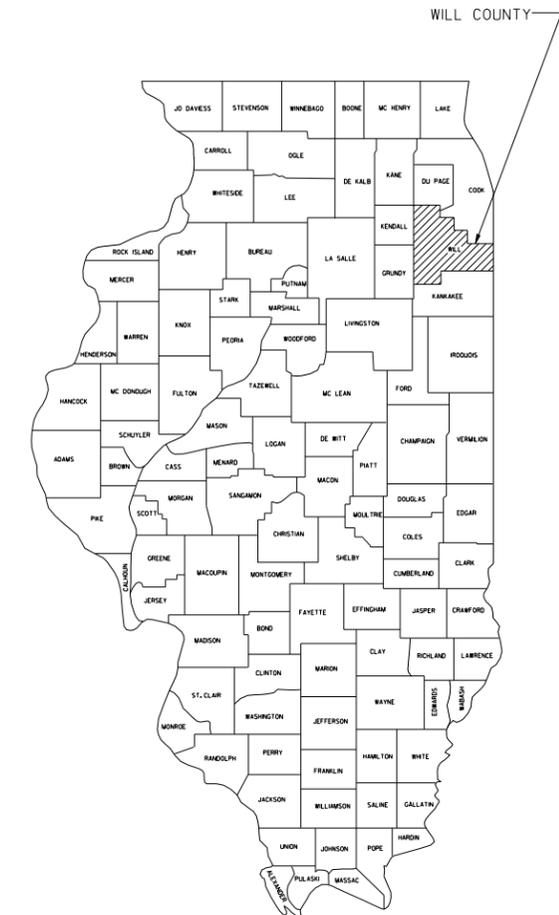
**2006**

**INDEX OF SHEETS**

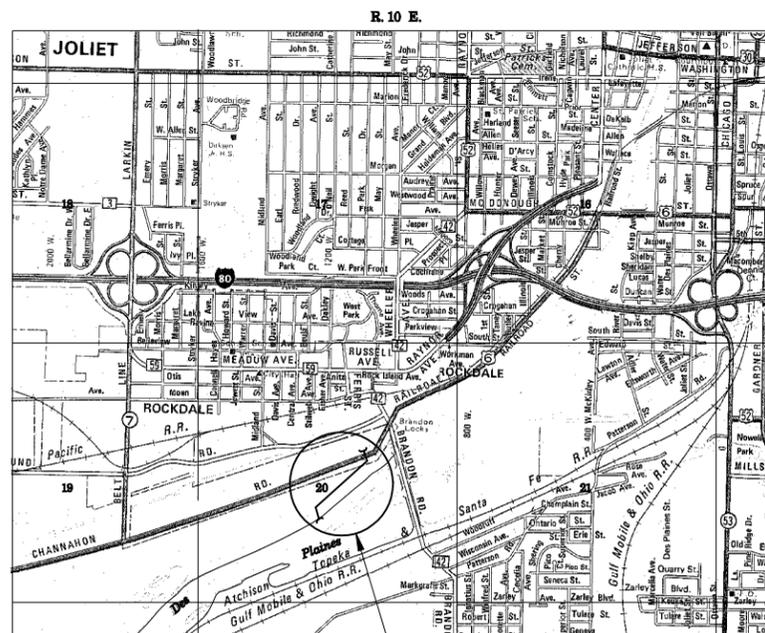
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**STANDARDS**

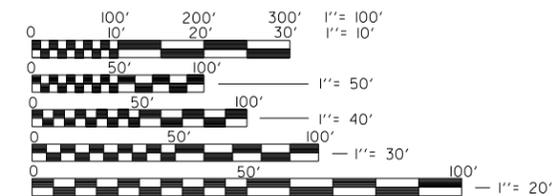
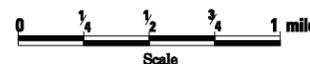
- 280001 TEMPORARY EROSION CONTROL SYSTEMS
- 353001 PCC BASE COURSE WITH BITUMINOUS CONCRETE BINDER AND SURFACE COURSES
- 442101 CLASS B PATCHES
- 542301 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 602406 MANHOLE TYPE A 72" DIAMETER
- 602701 CAST IRON STEPS
- 604001 FRAME AND LIDS TYPE 1
- 608001 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701602 URBAN LANE CLOSURE, MULTILANE 2W WITH BIDIRECTIONAL LEFT TURN LANE
- 702001 TRAFFIC CONTROL DEVICES
- 704001 TEMPORARY CONCRETE BARRIER



**REGIONAL MAP**



**Proposed Project Site**  
**LOCATION MAP**



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

Ted M. Montney 11/28/05  
 ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-049591  
 LICENSE EXPIRES 11-30-07



SUBMITTED BY *William J. Schuch* DATE 11-28-05  
 MANAGER, DIVISION OF PROJECT IMPLEMENTATION  
 APPROVED BY *Larry R. Clark* DATE 11-28-05  
 DIRECTOR

SUMMARY OF QUANTITIES			
CODE NO.	PAY ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.96
20201500	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	80
20800150	TRENCH BACKFILL	CU YD	290
20800250	TEMPORARY EROSION CONTROL SEEDINGS	POUND	200
28000400	PERIMETER EROSION BARRIER	FOOT	362
28100107	STONE RIPRAP, CLASS A4	SQ YD	18
28200100	FILTER FABRIC FOR USE WITH RIPRAP	SQ YD	18
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	28
35300400	PORTLAND CEMENT CONCRETE BASE COURSE 9"	SQ YD	324
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	40
40600760	BITUMINOUS CONCRETE BINDER COURSE, MIXTURE B, TYPE 2	TON	34
40600850	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I, TYPE 2	TON	37
44000100	PAVEMENT REMOVAL	SQ YD	424
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	122
*50100200	REMOVAL OF EXISTING STRUCTURES	EACH	1
*50200500	COFFERDAMS	EACH	1
50800105	REINFORCEMENT BARS	POUND	100
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTION 48"	EACH	1
54248510	CONCRETE COLLAR	CU YD	2.4
550A0480	STORM SEWERS, CLASS A, TYPE 2 48"	FOOT	1254
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LTD	EACH	5
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	122
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3
67100100	MOBILIZATION	L SUM	1
*70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
70400100	TEMPORARY CONCRETE BARRIER	FOOT	188
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	175
81400100	HANDHOLE	EACH	1
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	225
*88600600	DETECTOR LOOP REPLACEMENT	FOOT	66
89502380	REMOVE EXISTING HANDHOLE	EACH	1
*Z0013825	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	59
*Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE), TEST LEVEL 2	EACH	1
*Z0030340	IMPACT ATTENUATORS, RELOCATE (NON REDIRECTIVE), TEST LEVEL 2	EACH	1
*	SEEDING, MULCHING AND FERTILIZING	ACRE	2.0
*XX003949	CONSTRUCTION STAKING	L SUM	1
*X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	281

J.U.L.I.E.	Call 48 hours prior to construction	(800) 892-0123
Electricity	John Pribich Commonwealth Edison Three Lincoln Center 4th Floor Oakbrook Terrace, IL 60181-4260	(630) 437-2212
Telephone	Pam Astle SBC 225 West Randolph Street Floor 11 Chicago, IL 60606	(312) 424-2198
Gas	Scott Stogsdill NICOR Gas Engineering Department 1844 Ferry Road Naperville, IL 60563-9600	(630) 983-8676 Ext. 2362
Cable Television	Mary Stefan ComCast Cable Communications 688 Industrial Drive Elmhurst, IL 60126	(630) 600-6346
Public Works	James Planinsek Village Of Rockdale 603 Otis Avenue Rockdale, IL 60436	(815) 725-8937
Public Works	Dennis Duffield City Of Joliet 150 West Jefferson St. Joliet, IL 60432	(815) 724-4000

GENERAL NOTES

All elevations refer to N.A.V.D. (North American Vertical Datum).

The Contractor shall furnish, erect, and when directed by the Engineer, completely remove two construction signs. The exact location of the signs shall be determined by the Engineer in the field.

All lateral drainage that exists prior to construction shall be restored as shown on the plans and as directed by the Engineer. Unless otherwise specified, all costs of restoration shall be considered included in the Contract, and no additional compensation will be allowed.

All excess excavation and unsuitable materials shall be disposed of at locations provided by the Contractor at his expense and at locations inspected and approved by the Engineer.

All construction operations shall be contained within the easement area or work limits as indicated on the plans.

Class SI Concrete shall be used throughout. All exposed edges of concrete shall be beveled 3/4".

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M322 Grade 60.

Plan dimensions and details relative to the existing structure have been taken from existing plans and/or past surveys and reports and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall submit his proposed method of maintaining storm sewer flows to the Engineer for approval prior to beginning construction.

The Contractor is reminded to protect and restore at his expense, in accordance with Article 107.20 of the Standard Specifications, any private or public property, including access roads, which may be damaged or destroyed due to construction operations.

All utilities affected by the improvement shall be adjusted by others except as noted in the plans. Prior to beginning work in the vicinity of the utilities, the Contractor shall contact the respective owners as shown on this sheet, and he shall schedule his work so as not to interfere with these adjustments.

Unless otherwise specified, all utilities shall be protected and not disturbed. All costs of protection shall be considered included in the contract, and no additional compensation will be allowed.

All open excavations are to be surrounded with a 4'-0" construction fence during non-working hours. The fence material shall be approved by the Engineer. The cost shall be considered included in the contract.

Notes on Emergency Repair Completed 1-14-05:

A section of pavement above the existing 48" CMP collapsed on 1-14-05. The damaged pavement was removed and a 10'+ section of the existing CMP was encased with concrete. The pavement was then repaired with a concrete patch.

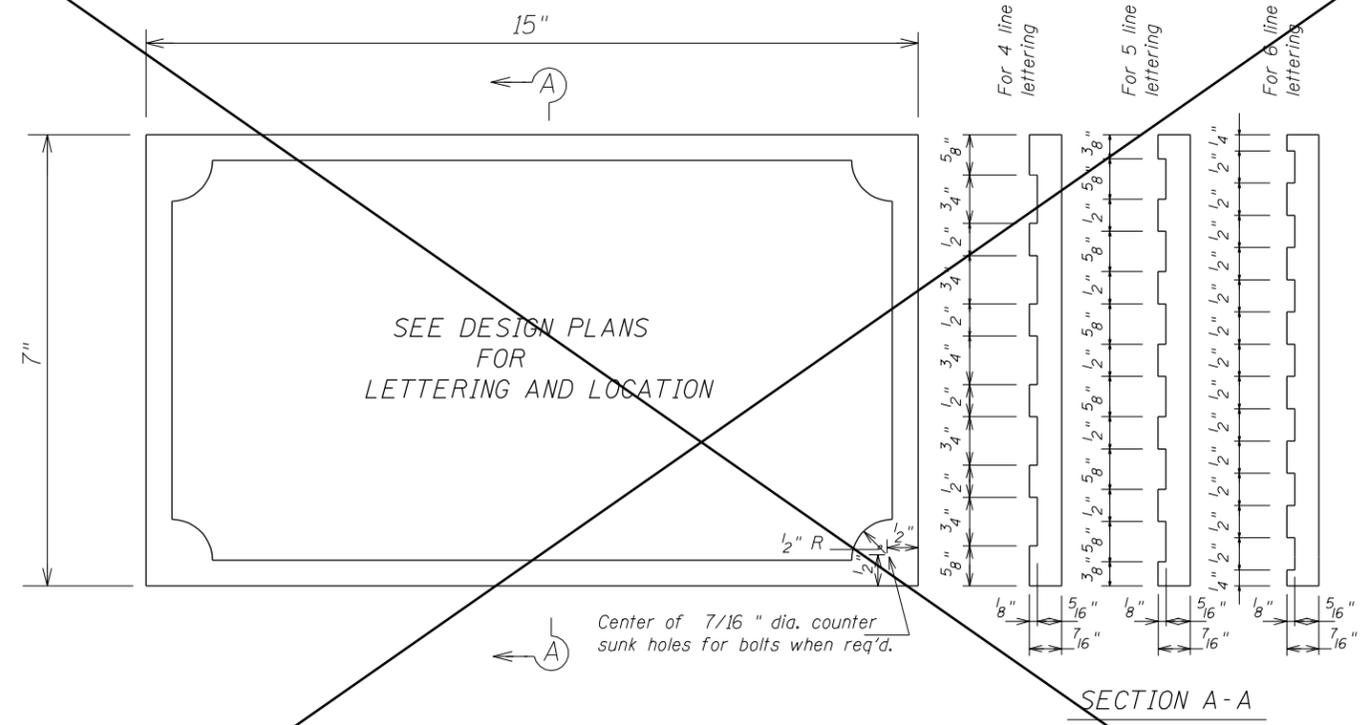
For additional information on this emergency repair, contact: Rick Wojcik at IDOT District 1, ph# 847-705-4098.

\* SEE PLANS AND/OR SPECIAL PROVISIONS

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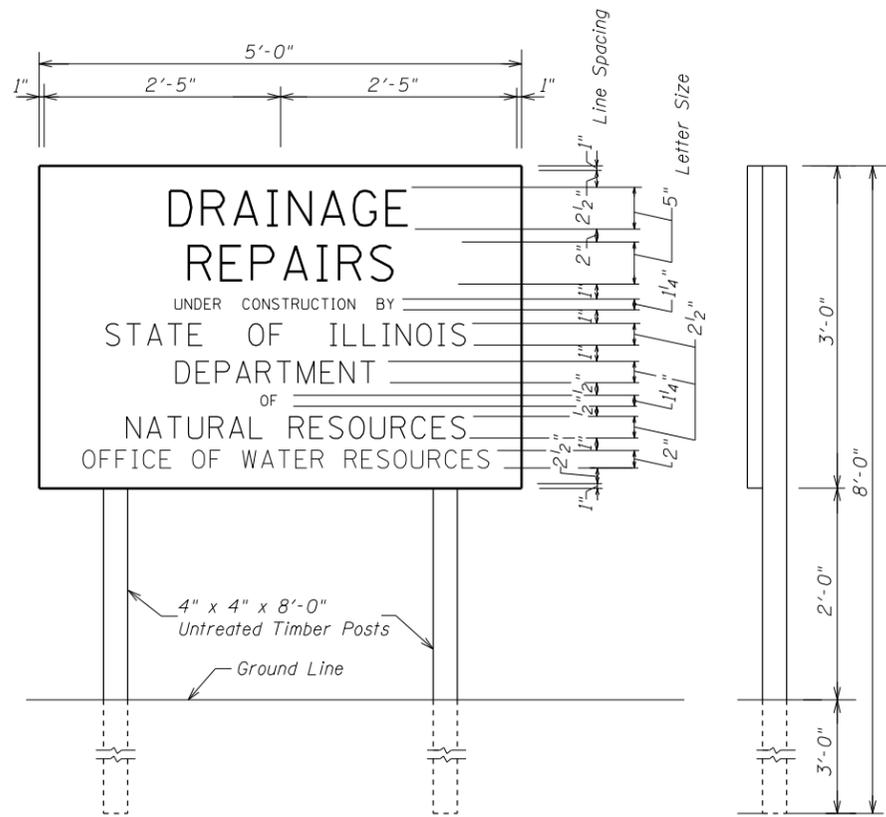
STANDARD SYMBOLS

Center Line.....	-----
Existing Right of Way.....	-----
Permanent Easement.....	Perm. Ease. ----- Perm. Ease.
Temporary Easement.....	Temp. Ease. ----- Temp. Ease.
Railroad Tracks.....	-----
Existing Culvert.....	-----
Culvert to be Constructed.....	-----
Guy Wire or Anchor.....	-----
Guy Pole.....	-----
Powerline Pole.....	-----
Telephone or Telegraph Pole.....	-----
Pipelines.....	-----
Gas.....	G-----G-----G-----
Water.....	W-----W-----W-----
Oil.....	O-----O-----O-----
Storm Sewer.....	-----SS-----
Sanitary Sewer.....	-----San-----
Electric Cable, U (Underground), A (Aerial).....	E-----E-----E-----
Telephone Cable, U (Underground), A (Aerial).....	T-----T-----T-----
Cable Television, U (Underground), A (Aerial).....	TV-----TV-----TV-----
Catch Basin.....	○
Manhole.....	⊙
Inlet.....	□
Waterline Valve.....	⊞
Fire Hydrant.....	⊕
Vents.....	V
Meter Boxes.....	M
Traps, Grease etc.....	T
Cistern or Well.....	C
Cesspool or Septic Tank.....	●
Fountain.....	F
Fenceline.....	x-----x-----x-----
Direction of Flow.....	----->
Bridge.....	-----



DETAIL OF NAME PLATE

**Material** - Best quality brass or bronze.  
**Bordering and Lettering** - Raised 1/8", square cut and not tapered. Top surface polished.  
**Fastenings** - For concrete rails and culvert headwalls: 4 lugs at least 3" long cast on back of plate.  
 For steel rails: plate to be bolted on with 4 - 3/8" dia. brass or bronze hex head bolts.

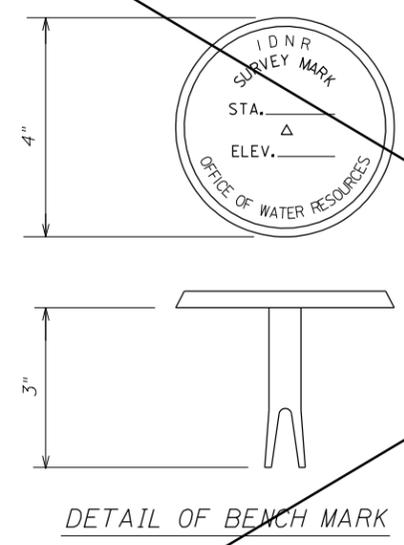


GENERAL NOTES

Signs shall be made of 1" lumber rigidly cleated, or of metal (18 ga.). The Contractor shall furnish all material and labor for constructing and erecting the signs. The signs shall be placed prior to the starting of actual construction operations at each end of the construction section or as directed by the Engineer. Before any sign is erected, it shall be approved by the Engineer as to its appearance and quality of construction. The signs shall remain in place and shall be maintained in satisfactory condition until the project is accepted by the department. The Contractor shall then remove the signs and the material will become his property.

The letters on the sign shall be black mechanical style on a white background and appropriate border lines. The signs shall be painted by a professional painter, and the size of the letters shall be as shown on these Plans.

No extra compensation will be allowed the Contractor for these signs and the cost shall be considered incidental to the contract.

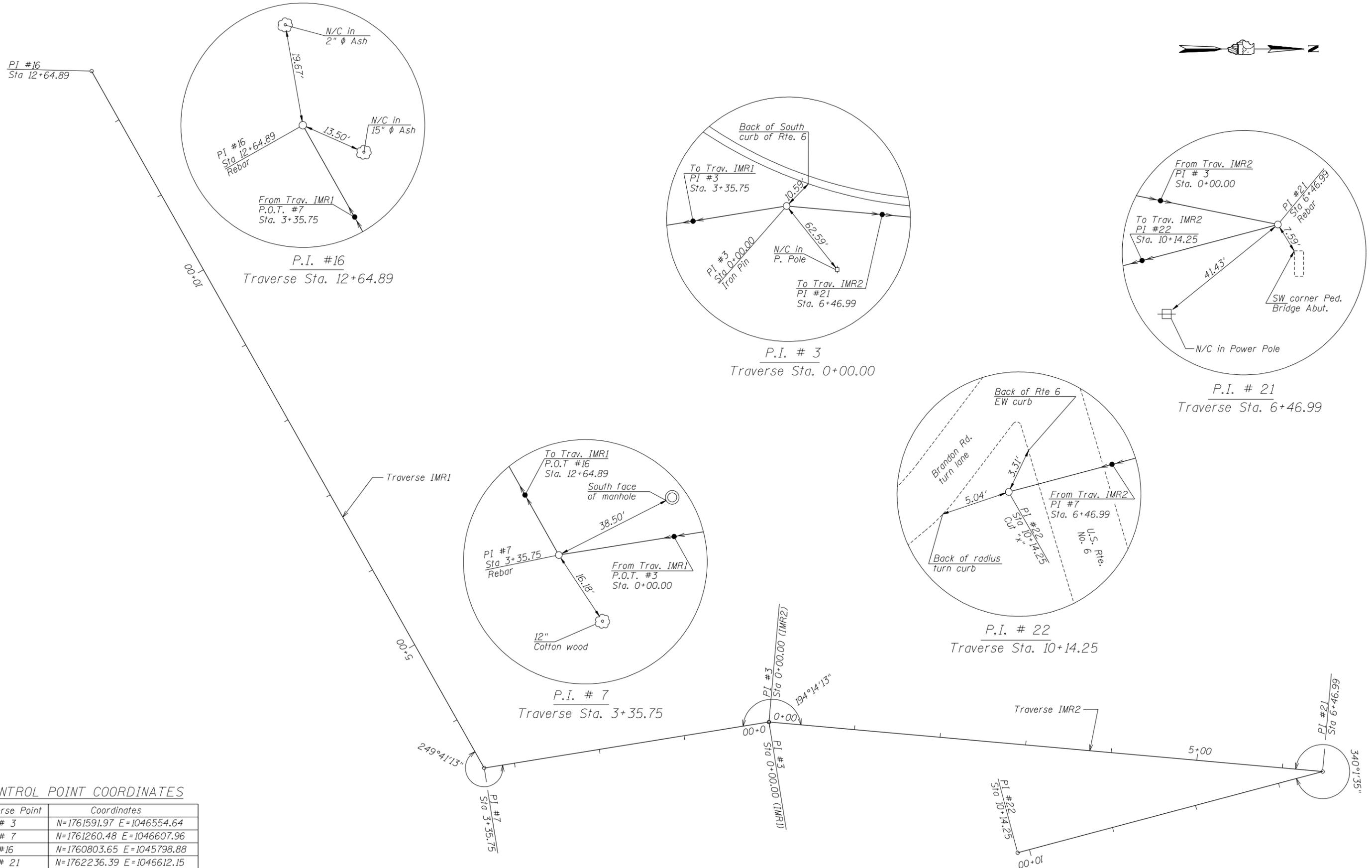


DETAIL OF BENCH MARK

Bench Mark to be furnished by the Office of Water Resources.  
 See Design Plans for location.  
 Cost of placing shall be considered incidental to the Contract.

**NOTE TO CONTRACTOR**  
 The Standards for the Construction Sign, Name Plate and Bench Mark shown on this sheet shall be used only when called for on the Plans.

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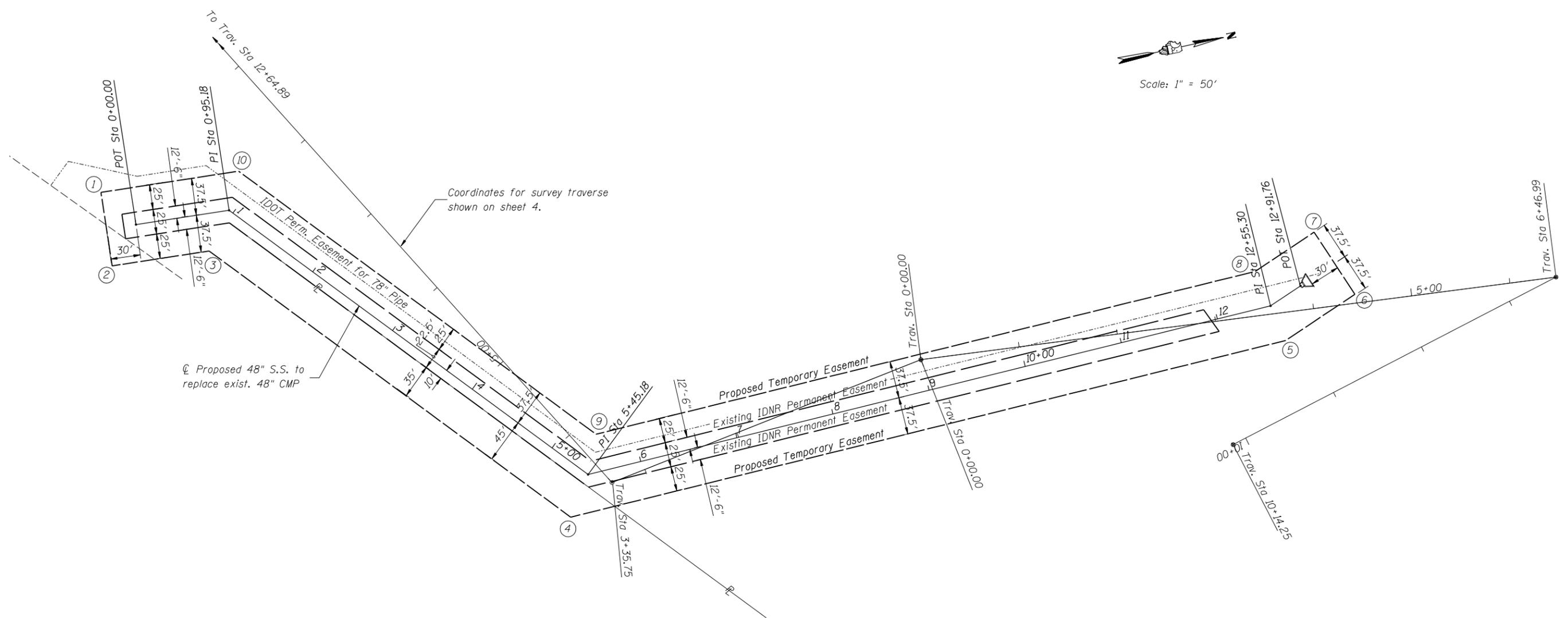
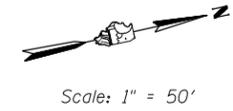


CONTROL POINT COORDINATES

Traverse Point	Coordinates
P.I. # 3	N=1761591.97 E=1046554.64
P.I. # 7	N=1761260.48 E=1046607.96
P.I. #16	N=1760803.65 E=1045798.88
P.I. # 21	N=1762236.39 E=1046612.15
P.I. # 22	N=1761881.44 E=1046706.43

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BM 3A Chis. square Rt. D.S. Wing Wall I & M Canal  
& Brandon Rd. Bridge  
Elev. 533.38



EASEMENT COORDINATES

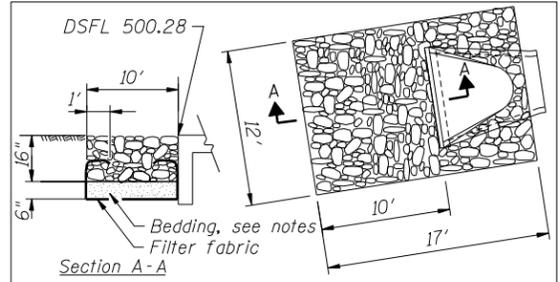
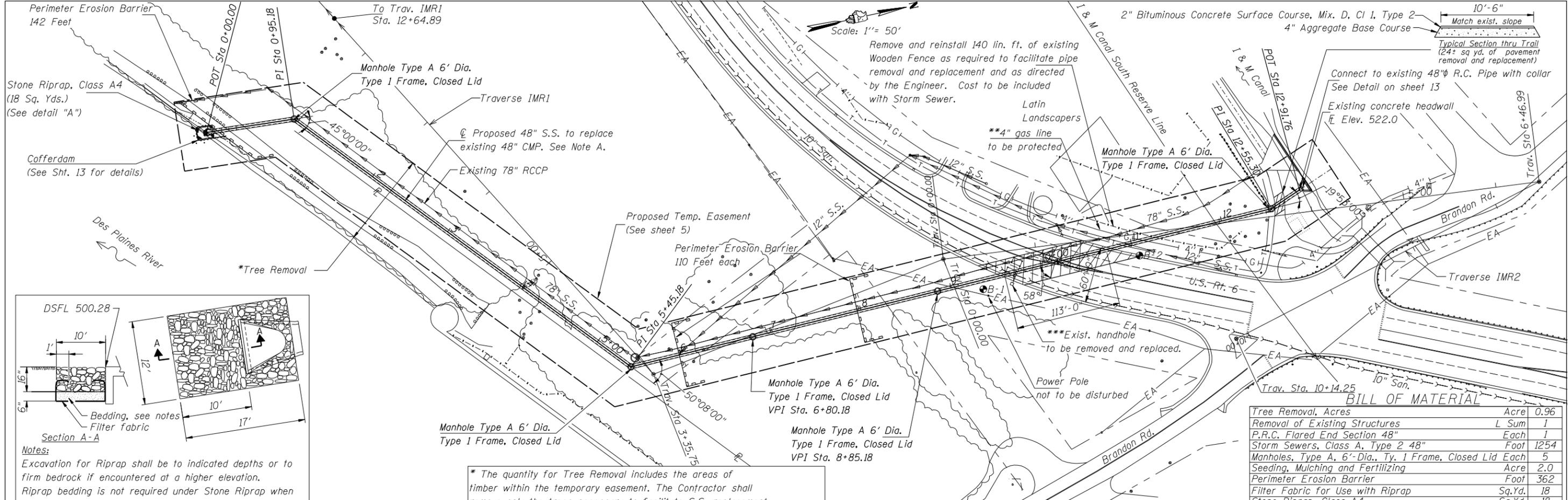
EASEMENT POINTS	COORDINATES
1	N=1760819.66 E=1046210.77
2	N=1760814.71 E=1046285.61
3	N=1760913.54 E=1046292.14
4	N=1761212.21 E=1046633.05
5	N=1761956.01 E=1046615.47
6	N=1762034.23 E=1046585.07
7	N=1762007.57 E=1046514.97
8	N=1761941.09 E=1046540.80
9	N=1761255.27 E=1046557.01
10	N=1760960.06 E=1046220.04

PIPE COORDINATES

PIPE C POINTS	COORDINATES
POT Sta 0+00.00	N=1760847.12 E=1046250.17
PI Sta 0+95.18	N=1760942.09 E=1046256.44
PI Sta 5+45.18	N=1761238.63 E=1046594.92
PI Sta 12+55.30	N=1761948.55 E=1046578.14
POT Sta 12+91.76	N=1761982.53 E=1046564.93

NOTE:  
The location of the existing 48" CMP is based upon existing plans & is located from soundings at the upstream end and a downstream flowline survey shot. The exact location of the existing pipe will need to be determined in the field by the contractor. The proposed 48" S.S. shall replace the existing 48" CMP in its existing location.  
The existing 48" CMP is located within the existing permanent easement, therefore no additional permanent easement will need to be acquired.  
The easement for IDOT's 78" pipe, as shown, is approximate.

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**Notes:**  
Excavation for Riprap shall be to indicated depths or to firm bedrock if encountered at a higher elevation. Riprap bedding is not required under Stone Riprap when placed on firm bedrock.

**Note A:**  
Excavation and backfill costs shall be considered as included with the "Storm Sewer" pay item. The removal and disposal of the existing 48" CMP shall be paid for as Removal of Existing Structures. Location of pipe and stationing is approximate. Refer to note on sheet 5. Place manholes at existing pipe bend points and grade changes found in field as directed by the Engineer.

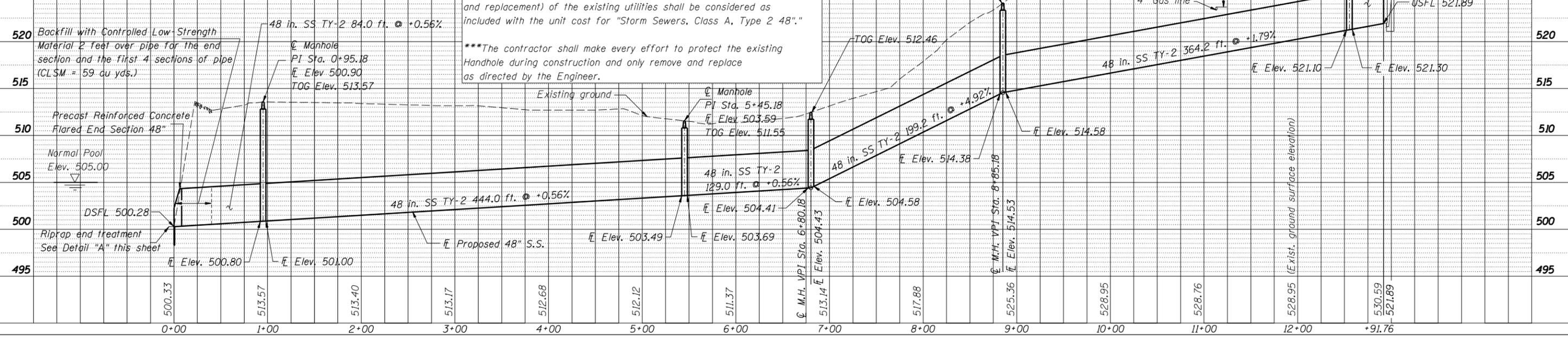
\* The quantity for Tree Removal includes the areas of timber within the temporary easement. The Contractor shall remove only the trees necessary to facilitate S.S. replacement as approved by the Engineer and quantity shall be adjusted accordingly.

\*\*The depths of the existing utilities (sanitary sewer, storm sewers, gas line, and telephone line) shall be determined in the field before construction of S.S. has commenced, and any necessary adjustments to proposed S.S. depth and manhole invert elevations shall be made accordingly to avoid conflict with these existing utilities. All adjustments shall be approved by the Engineer. Existing utilities shall be adjusted as required to facilitate removal and replacement of the 48" S.S. All costs associated with the adjustments (including removal and replacement) of the existing utilities shall be considered as included with the unit cost for "Storm Sewers, Class A, Type 2 48".

\*\*\*The contractor shall make every effort to protect the existing Handhole during construction and only remove and replace as directed by the Engineer.

**BILL OF MATERIAL**

Tree Removal, Acres	Acres	0.96
Removal of Existing Structures	L Sum	1
P.R.C. Flared End Section 48"	Each	1
Storm Sewers, Class A, Type 2 48"	Foot	1254
Manholes, Type A, 6'-Dia., Ty. 1 Frame, Closed Lid	Each	5
Seeding, Mulching and Fertilizing	Acres	2.0
Perimeter Erosion Barrier	Foot	362
Filter Fabric for Use with Riprap	Sq.Yd.	18
Stone Riprap, Class A4	Sq.Yd.	18
Controlled Low-Strength Material	Cu.Yd.	59
Bituminous Concrete Surface Course	Ton	3
Aggregate Base Course, Type B 4"	Sq.Yd.	24
Pavement Removal	Sq.Yd.	24
Cofferdams	Each	1



DESIGNED BY: RLP  
DRAWN BY: JLF

CHECKED BY: JLF  
CHECKED BY: RLP

SYMBOLS

-  Temporary Impact Attenuators
-  Arrow board
-  Work area
-  Barricade or drum with steady burning monodirectional light
-  Flexible delineators
-  Drum with steady burning light
-  Sign on portable or permanent support
-  Type III Barricade
-  Type A warning light

GENERAL NOTES FOR TRAFFIC CONTROL (Sheets 7-8)

All the Traffic Control devices shall conform to the Traffic Control Plans or the latest edition of the State of Illinois "Manual of Uniform Traffic Control Devices for Streets and Highways" and shall be in place before construction is started.

The Traffic Control Plans shall serve as a guide for safe diversion of traffic during execution of this contract. However, the contractor may improve or modify the traffic control plans for his construction needs but not at the expense of public safety or convenience. Any contractor-proposed traffic control plans shall be submitted for the written approval of the Engineer. No additional compensation will be allowed for contractor requested changes.

The exact number, location and spacing of all signs and traffic control devices may be adjusted to fit field conditions as directed by the Engineer.

Bi-directional steady burning lights and double vertical panels shall be mounted on the temporary concrete barrier. However, the contractor may improve or modify the traffic control plans for his construction needs but not at the expense of public safety or convenience. Any contractor-proposed traffic control plans shall be submitted for the written approval of the Engineer. No additional compensation will be allowed for contractor requested changes.

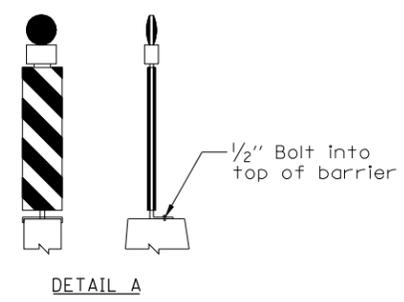
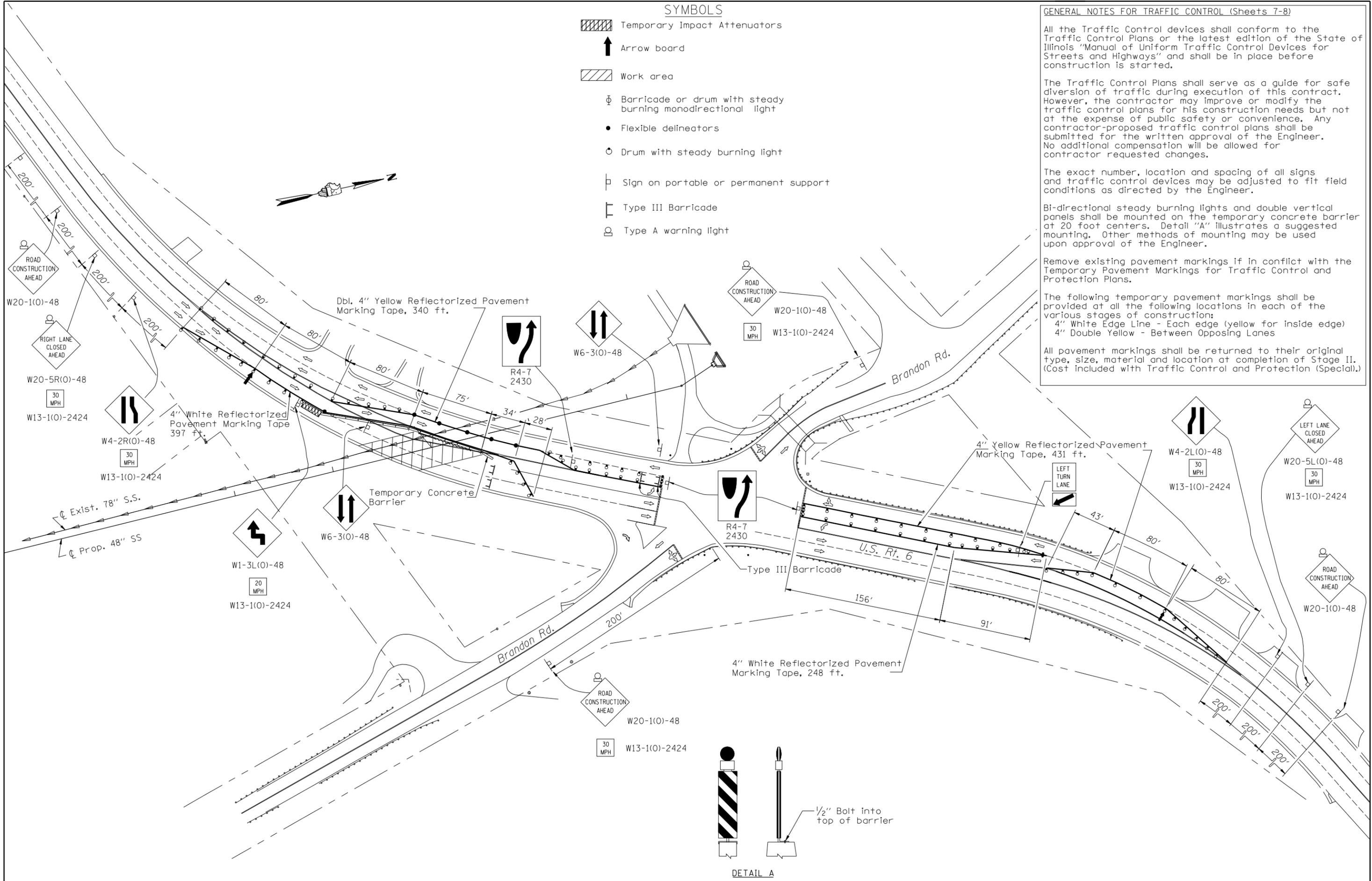
Remove existing pavement markings if in conflict with the Temporary Pavement Markings for Traffic Control and Protection Plans.

The following temporary pavement markings shall be provided at all the following locations in each of the various stages of construction:  
4" White Edge Line - Each edge (yellow for inside edge)  
4" Double Yellow - Between Opposing Lanes

All pavement markings shall be returned to their original type, size, material and location at completion of Stage II. (Cost included with Traffic Control and Protection (Special).)

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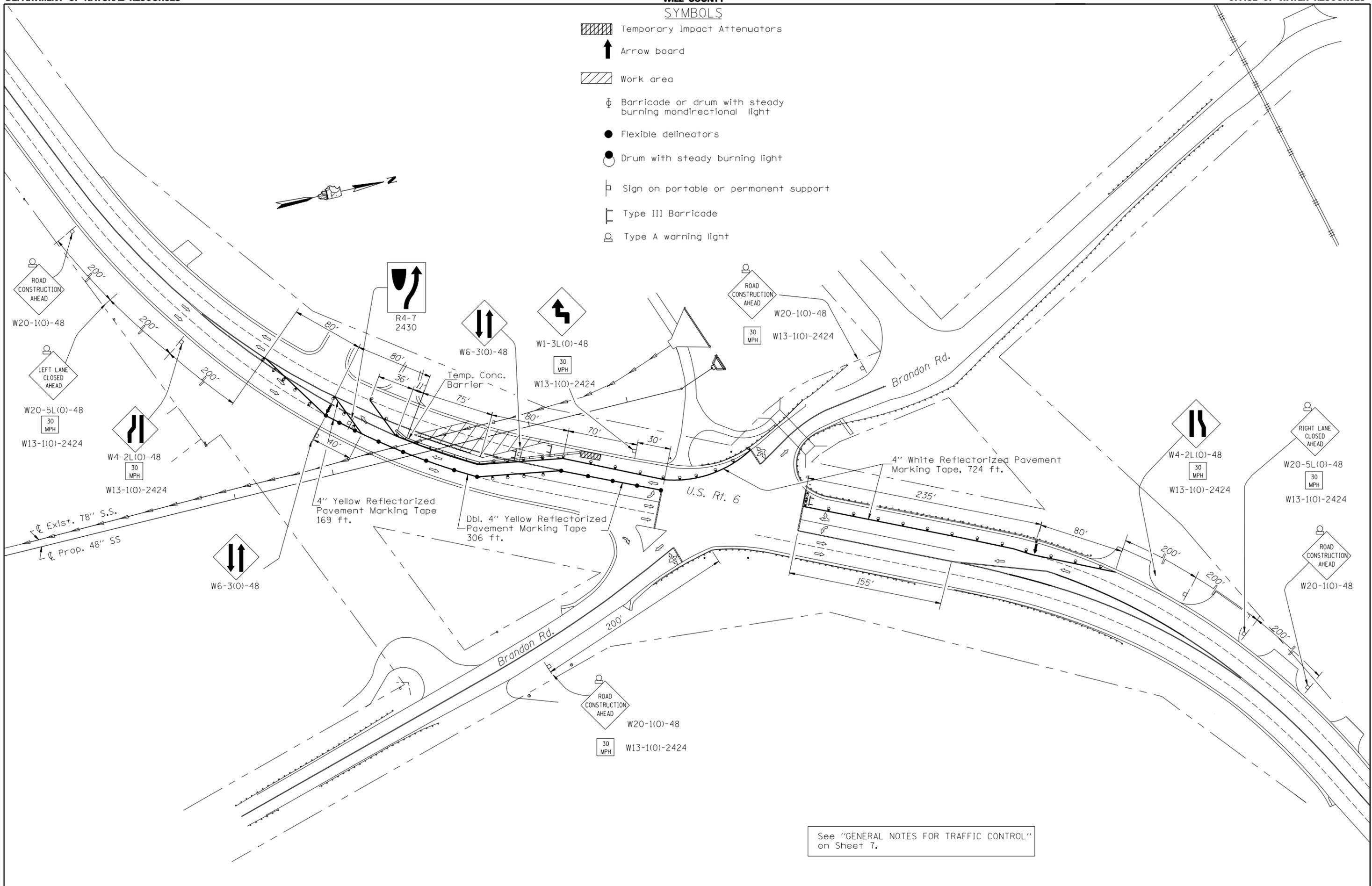
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SYMBOLS

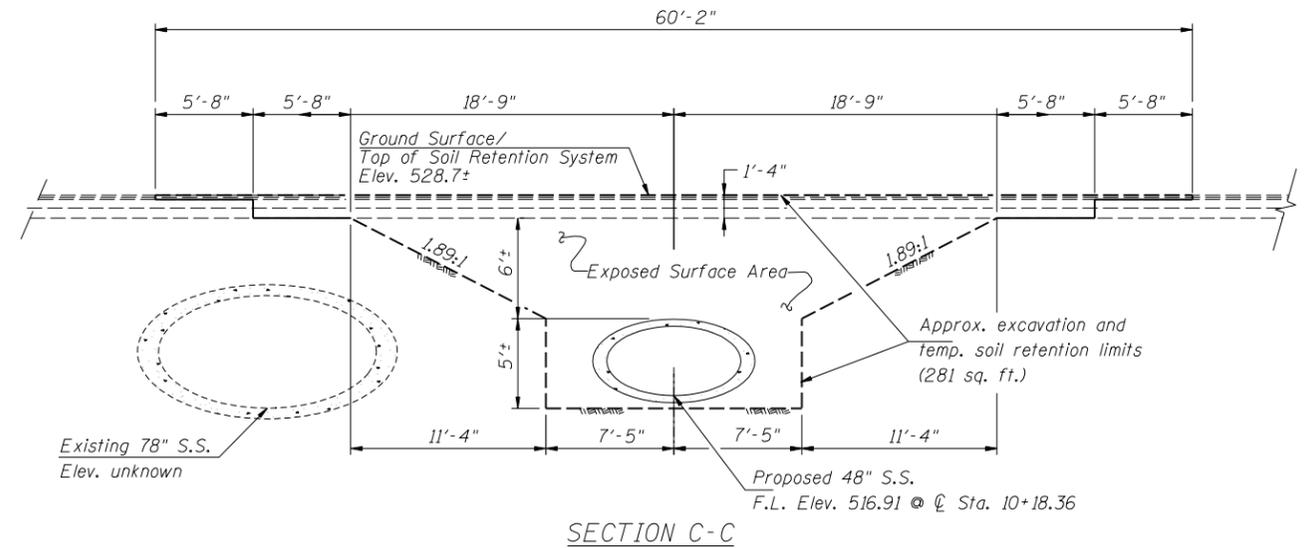
-  Temporary Impact Attenuators
-  Arrow board
-  Work area
-  Barricade or drum with steady burning monidirectional light
-  Flexible delineators
-  Drum with steady burning light
-  Sign on portable or permanent support
-  Type III Barricade
-  Type A warning light

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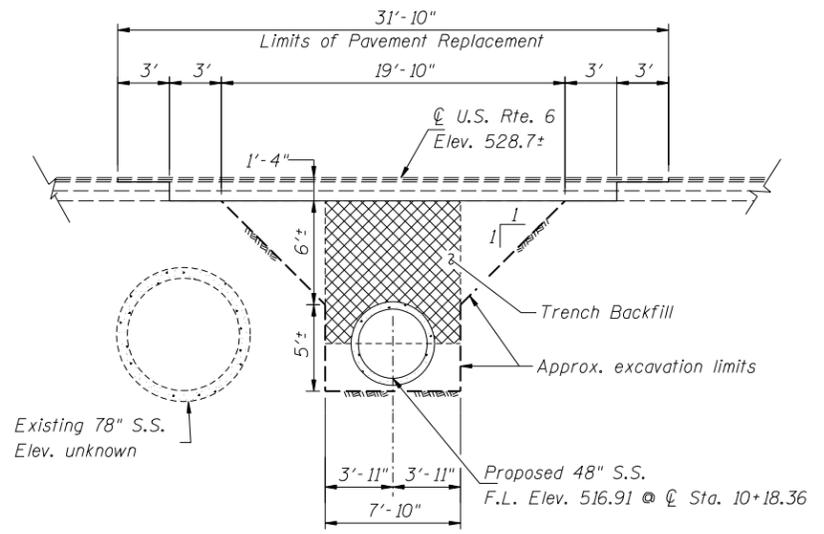


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See "GENERAL NOTES FOR TRAFFIC CONTROL" on Sheet 7.



SECTION C-C



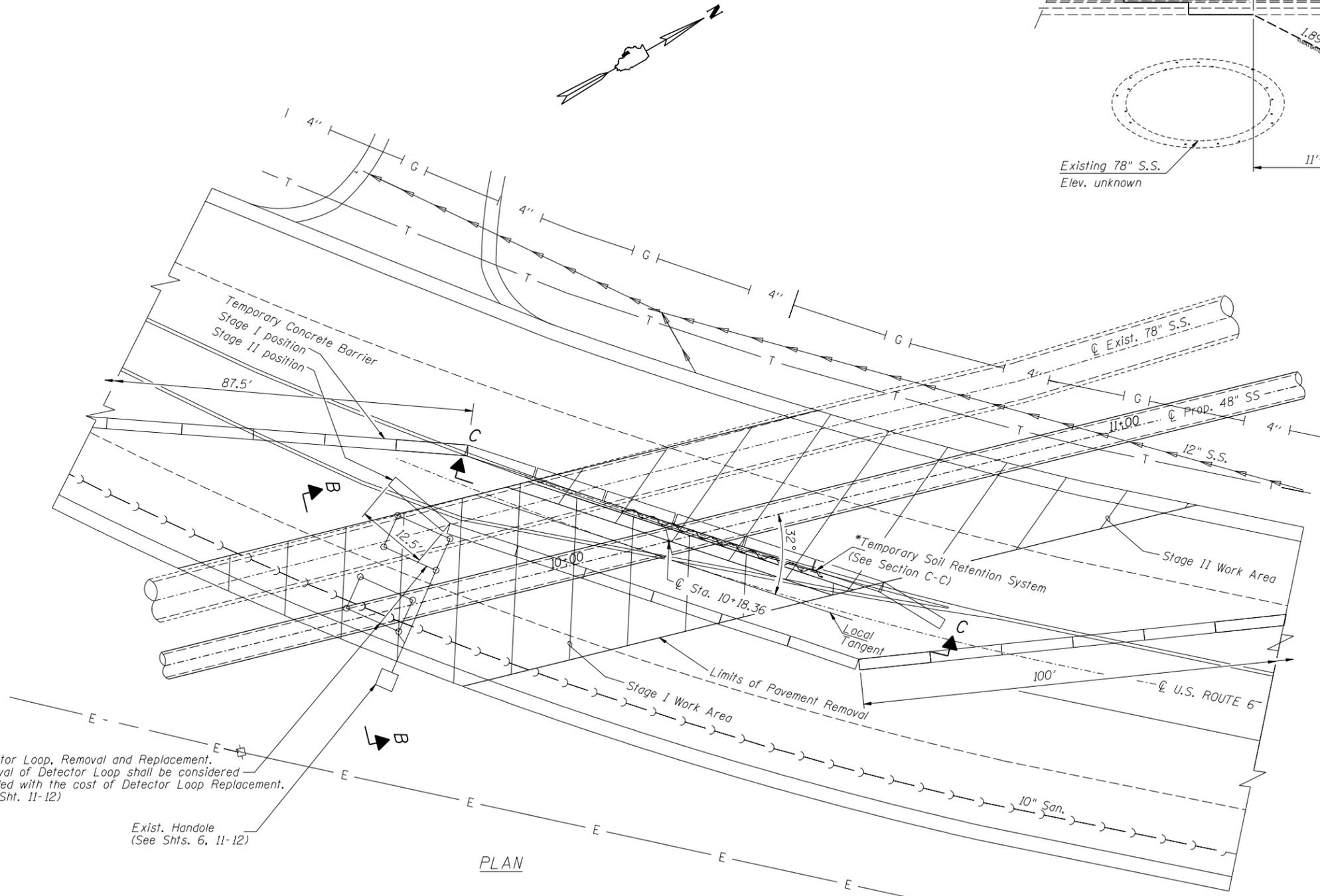
SECTION B-B

Notes:  
\*A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

BILL OF MATERIAL

Item	Unit	Quantity
Traffic Control and Protection (Special)	L Sum	1
Trench Backfill	Cu Yd	290
Temporary Concrete Barrier	Foot	188
Relocate Temporary Concrete Barrier	Foot	175
Temporary Soil Retention System	Sq Ft	281
Detector Loop, Replacement	Foot	66
**Impact Attenuators, Temporary (Non Redirective), Test Level 2	Each	1
**Impact Attenuators, Relocate (Non Redirective), Test Level 2	Each	1

\*\*See Sheets 7 and 8 for Impact Attenuator locations.

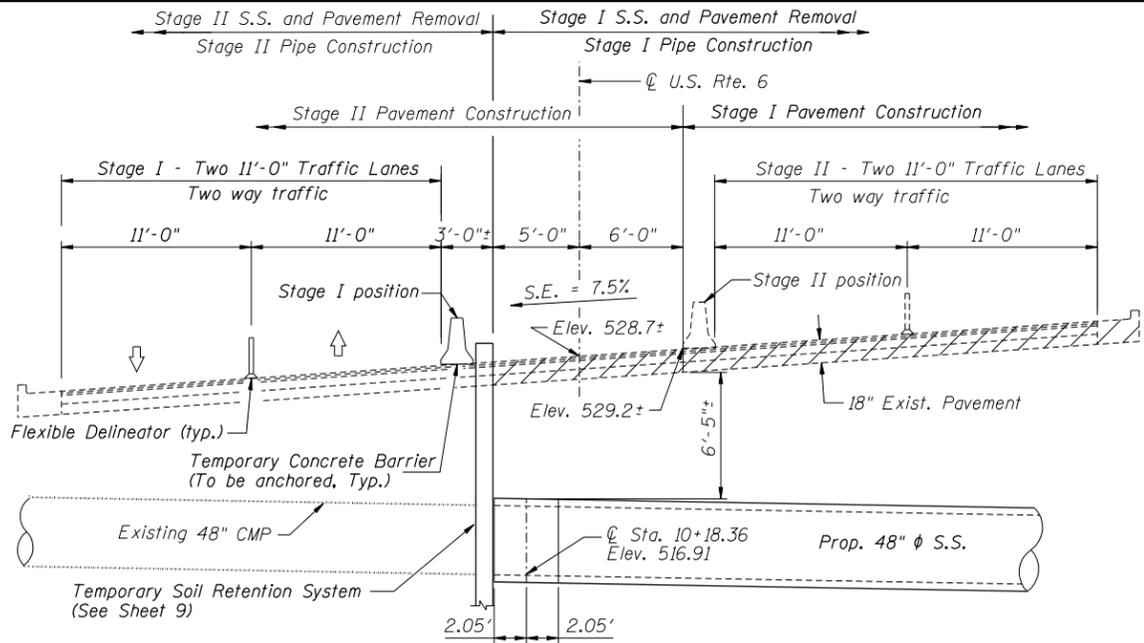


PLAN

Detector Loop, Removal and Replacement.  
Removal of Detector Loop shall be considered included with the cost of Detector Loop Replacement. (See Sht. 11-12)

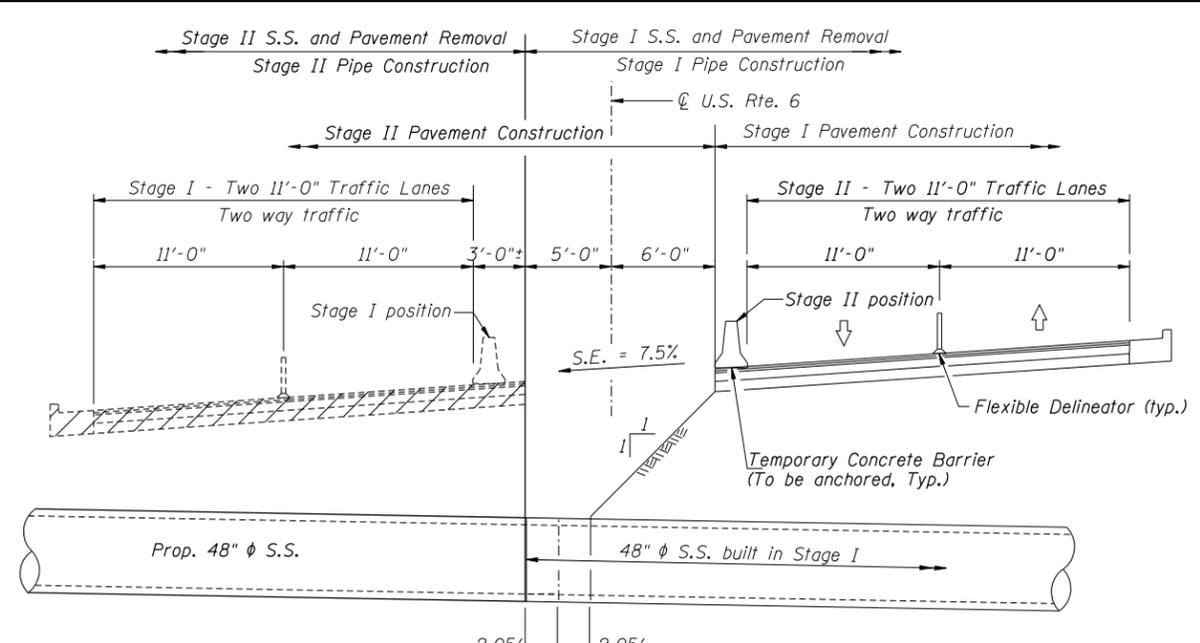
Exist. Handole  
(See Shts. 6, 11-12)

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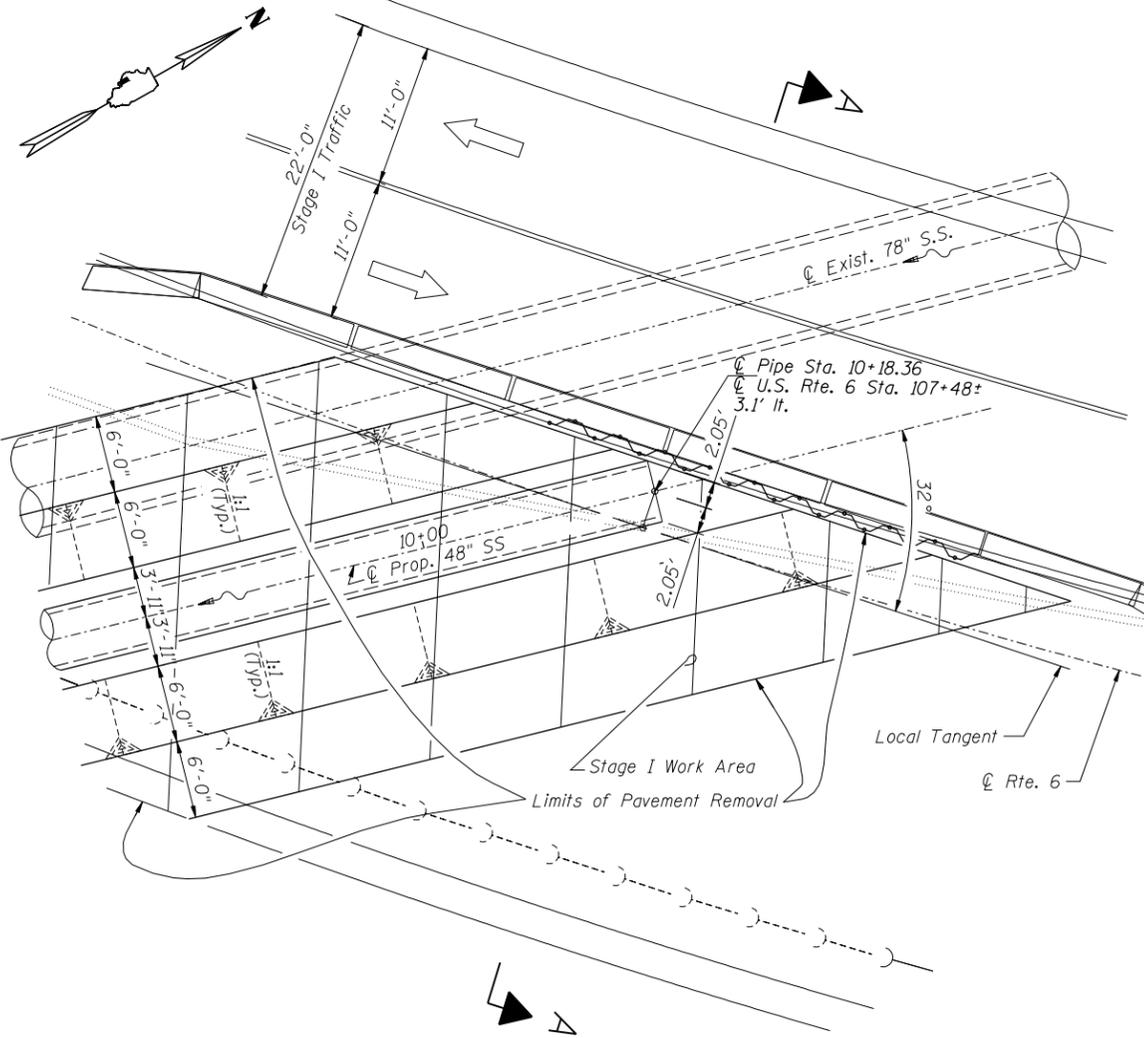
SECTION A-A

Stage I  
(Stage I S.S. and pavement removal.  
Stage I S.S. construction.)



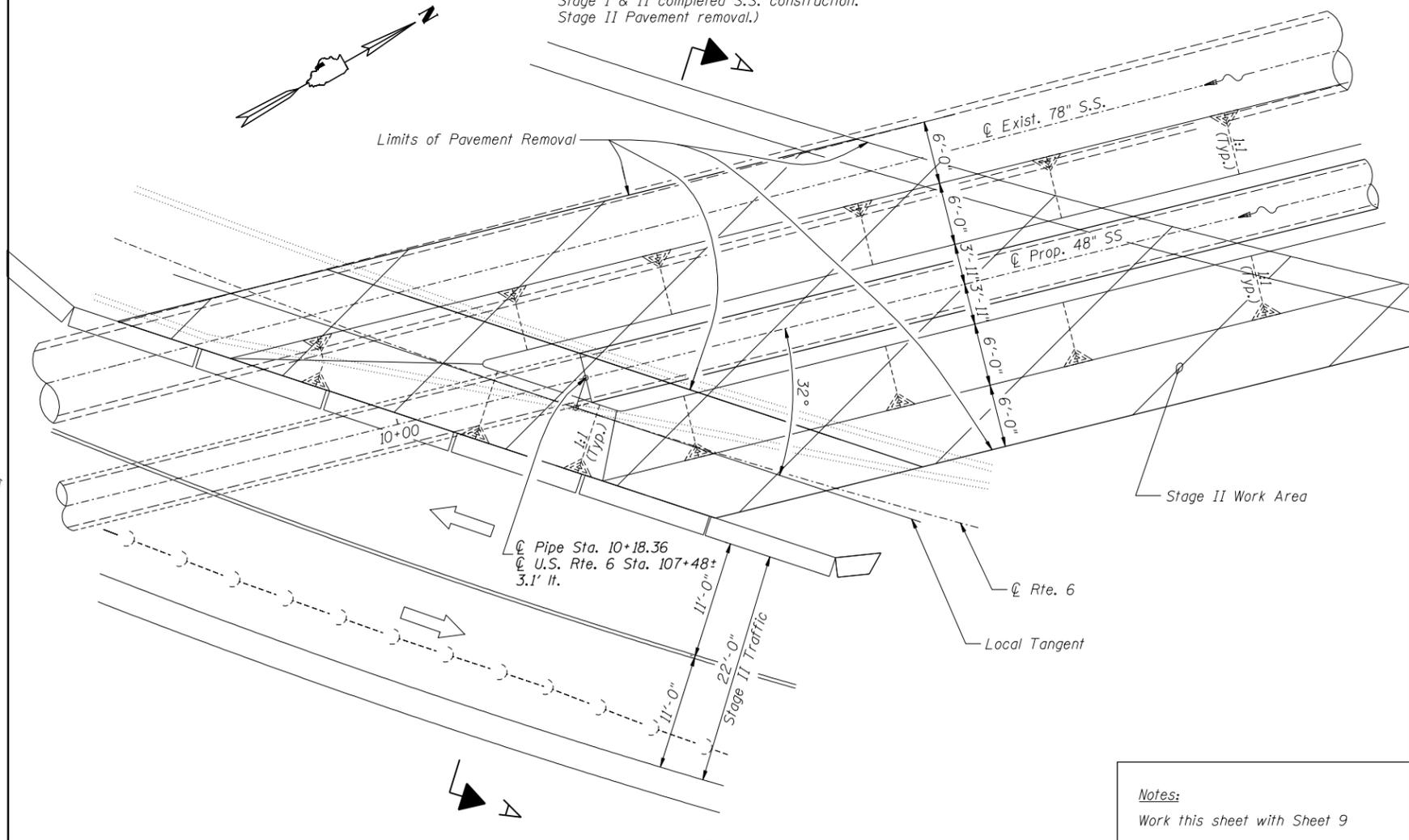
SECTION A-A

Stage II  
(Stage I completed pavement construction.  
Stage I & II completed S.S. construction.  
Stage II Pavement removal.)



PLAN

Stage I Construction



PLAN

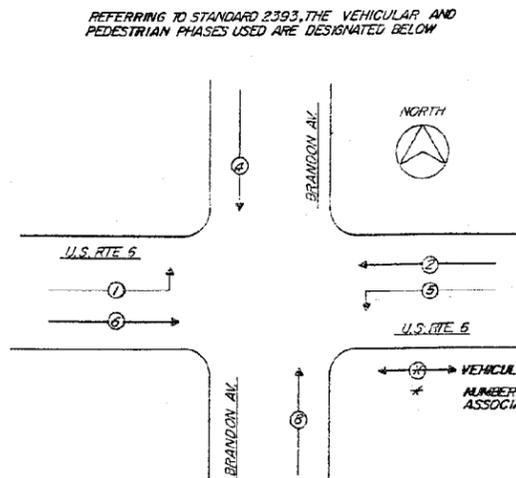
Stage II Construction

Notes:  
Work this sheet with Sheet 9

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**U.S. RTE 6 & BRANDON AV.**  
CONTROLLER SPECIFIED - FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE IX, 8 PHASES IN TYPE IX CABINET



PROPOSED PHASE DESIGNATION DIAGRAM

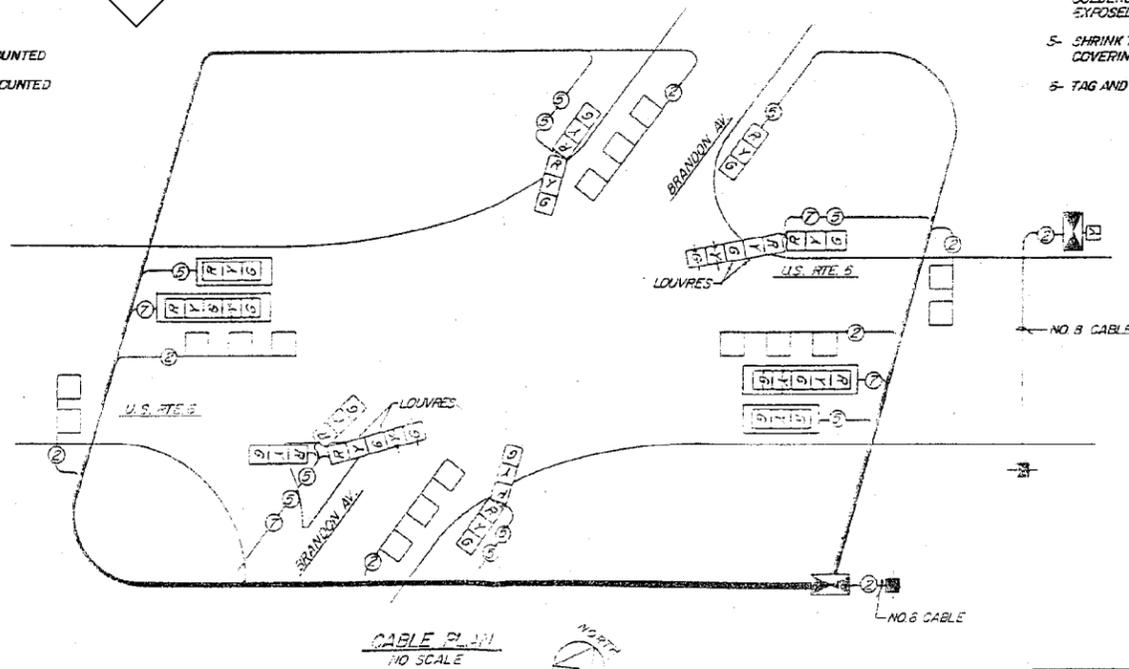
**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	DESCRIPTION
49	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 6 2/C
110	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 8 2/C
1637	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 5/C
665	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 7/C
1386	LIN. FT.	ELECTRIC CABLE IN CONDUIT NO. 14 2/C TWISTED, SHIELDED
1	EACH	SERVICE INSTALLATION, TYPE C
1	EACH	SERVICE INSTALLATION, TYPE D
15	LIN. FT.	CONCRETE FOUNDATION, TYPE A
3.5	LIN. FT.	CONCRETE FOUNDATION, TYPE D
20	LIN. FT.	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER
8	EACH	CONCRETE HANDHOLE
3	EACH	CONCRETE HEAVY-DUTY HANDHOLE
1	EACH	CONCRETE DOUBLE HANDHOLE
338	LIN. FT.	TRENCH AND BACKFILL

THIS SHEET FOR INFORMATION ONLY

**SCHEDULE OF QUANTITIES**

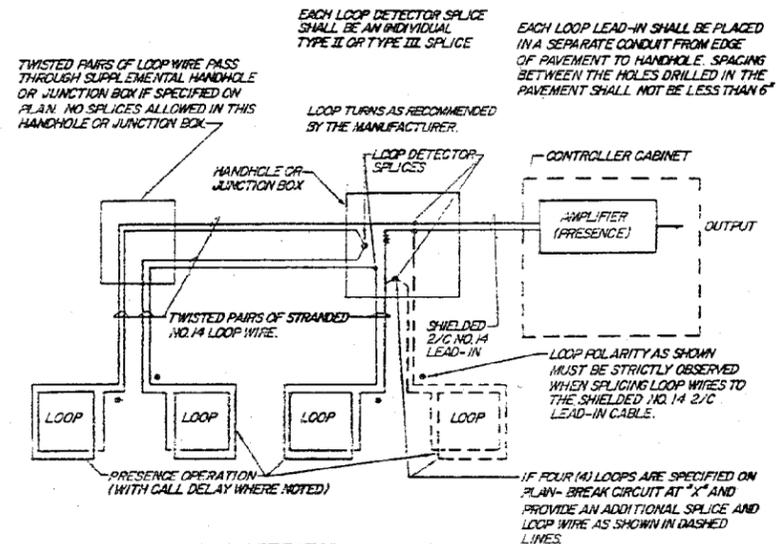
QUANTITY	UNIT	DESCRIPTION
16.5	30 FT.	SIGN PANEL TYPE 1
1	EACH	SIGNAL HEAD, 1-FACE, 1-SECTION, POST MOUNTED
1	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED
4	EACH	STRAIGHT RAY LOUVRE, TYPE A FOR 12 INCH LENS
3	EACH	TRAFFIC SIGNAL POST, FERROUS 14'
2	EACH	TRAFFIC SIGNAL POST, FERROUS 16'
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 26 FT.
1	EACH	FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE IX, 8 PHASES, IN TYPE IX CABINET
1	EACH	FLASHER CONTROLLER
6	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
545	LIN. FT.	DETECTOR LOOP, TYPE 1
455	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/4"
91	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"
62	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2"
99	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 2 1/2"
18	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 3"
64	LIN. FT.	GALVANIZED STEEL CONDUIT IN TRENCH 4"
95	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 2"
219	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 3"
43	LIN. FT.	GALVANIZED STEEL CONDUIT, PUSHED 4"
40	LIN. FT.	GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE, 1 1/4"
113	LIN. FT.	UNIT DUCT, WITHOUT CABLE IN TRENCH 1"



CABLE PLAN  
NO SCALE

**CABLE PLAN LEGEND**

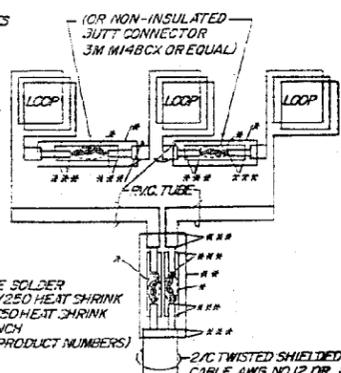
- SIGNAL FACE WITH BACKPLATE
- 12" TRAFFIC SIGNAL SECTION
- CONTROLLER CABINET
- VEHICLE DETECTOR, INDUCTION LOOP
- SERVICE INSTALLATION
- DENOTES NUMBER OF CONDUCTORS (NEW) ALL LOOP DETECTOR CABLE TO BE SHIELDED ALL CABLE NO. 14 EXCEPT AS INDICATED
- 8" TRAFFIC SIGNAL SECTION



**LOOP DETECTOR SCHEMATIC**

**STEPS**

- 1- REMOVE OUTER CABLE COVERING OR PVC TUBE LEAVING 4 INCHES OF INSULATED WIRE EXPOSED.
- 2- REMOVE INSULATION FOR 1 INCH AND SCRAPE COPPER CONDUCTOR.
- 3- INSERT CABLE AND/OR CONDUCTORS INTO THEIR RESPECTIVE APPROVED HEAT SHRINKABLE TUBING. THE CONDUCTORS SHALL THEN BE CONNECTED BY TWISTING TOGETHER AND SOLDERING WITH A ROSIN CORE SOLDER.
- 4- THE W.C.S.F. 070/250 TUBE SHALL COMPLETELY COVER THE SOLDERED CONNECTION AND THE INSULATION 1 INCH BEYOND ALL EXPOSED WIRE AT EITHER END OF THE CONNECTION.
- 5- SHRINK THE TUBE OVER THE SPLICE TO FORM A WATER TIGHT COVERING USING A HEAT SOURCE APPROVED BY THE ENGINEER.
- 6- TAG AND 1/8" LOOP LEAD-INS.



LOOP SPLICING USING HEAT SHRINKS  
NOTE: ELECTRICAL TAPE SHALL NOT BE USED WITH HEAT SHRINK SPLICES.

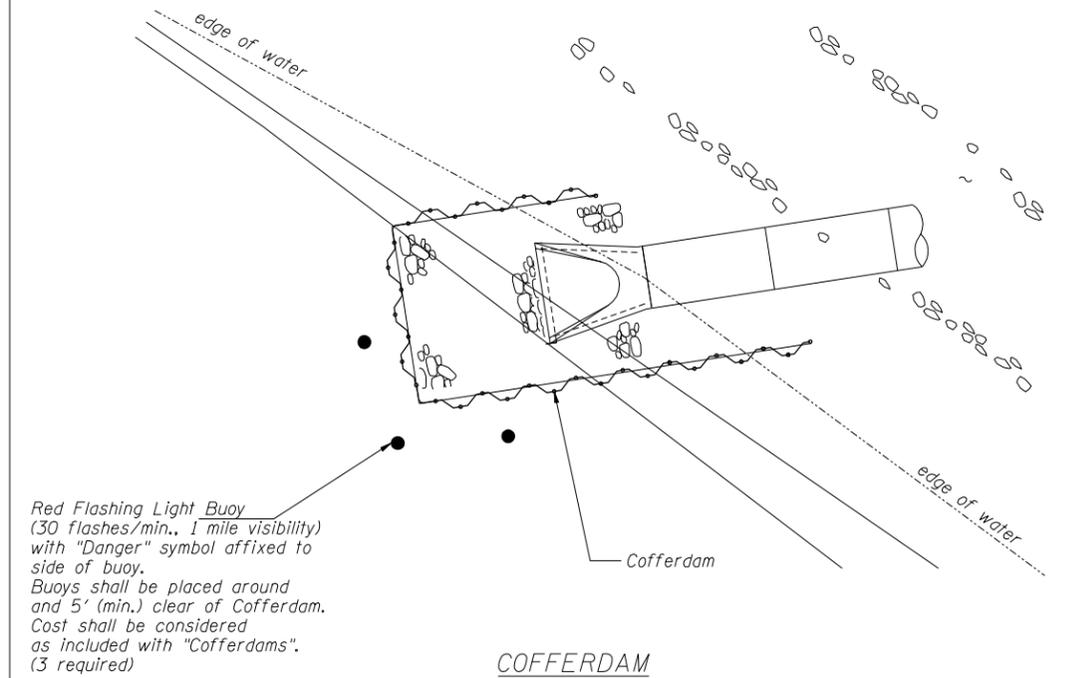
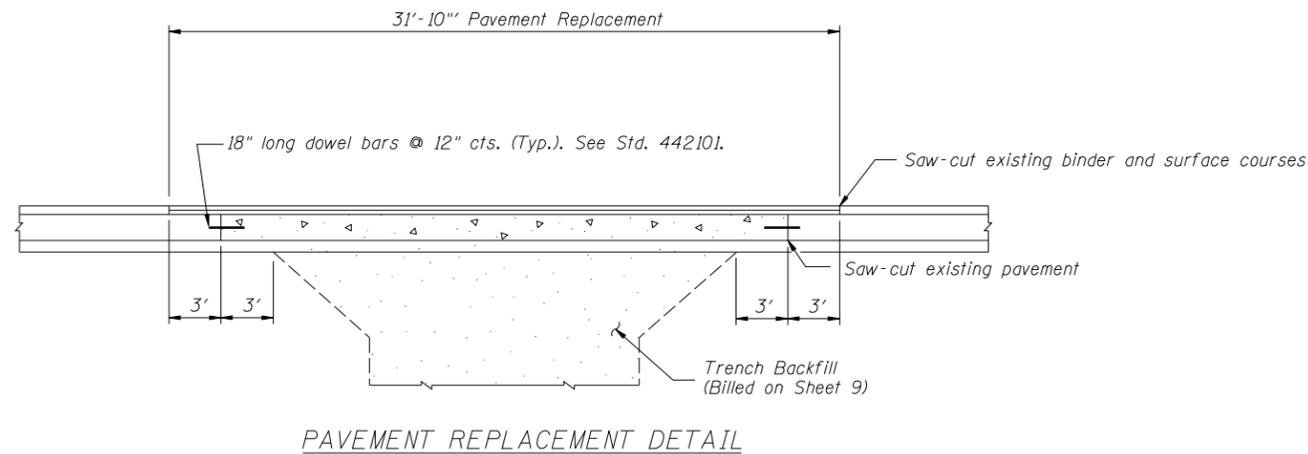
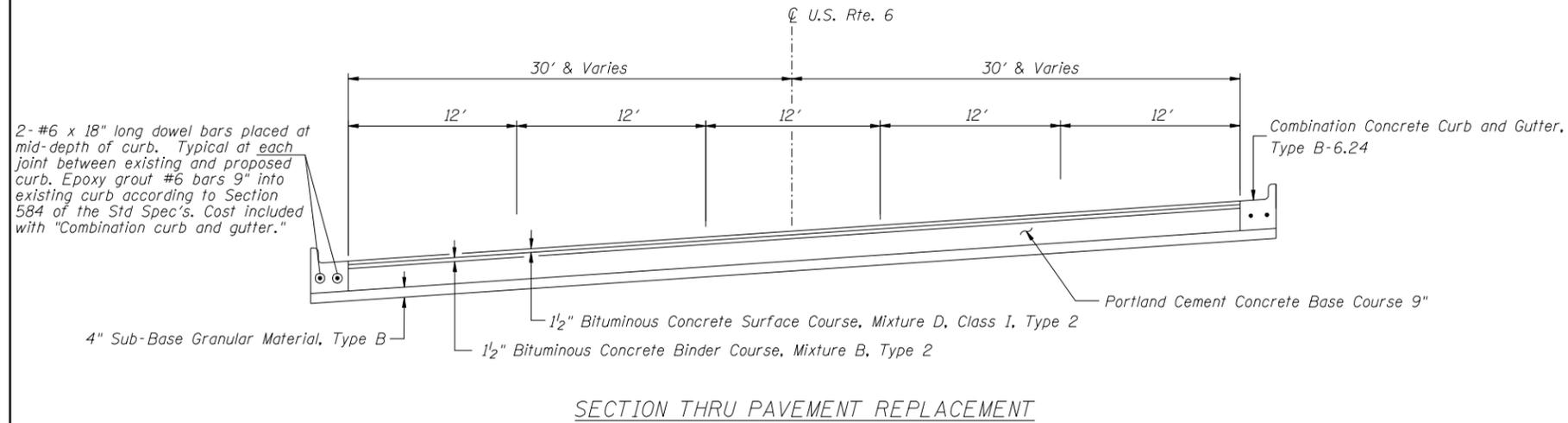
DEPARTMENT OF TRANSPORTATION  
DISTRICT I  
U.S. RTE. 6 & BRANDON RD.  
PHASE DESIGNATION DIAGRAM  
CABLE PLAN, SCHEDULE OF QUANTITIES  
LOOP DETECTOR SCHEMATIC

REVISIONS	
NAME	DATE
	7-5-89

HARMON E. HICKS & ASSOCIATES  
9525 SO. 79TH AVENUE  
HICKORY HILLS, ILLINOIS 60457

SCALE: NONE  
DATE: 1-11-88  
DRAWN BY: H.F.  
CHECKED BY: H.E.H.

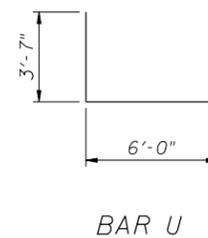
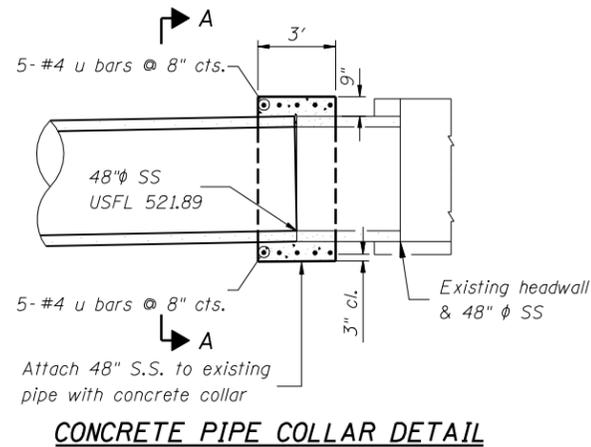
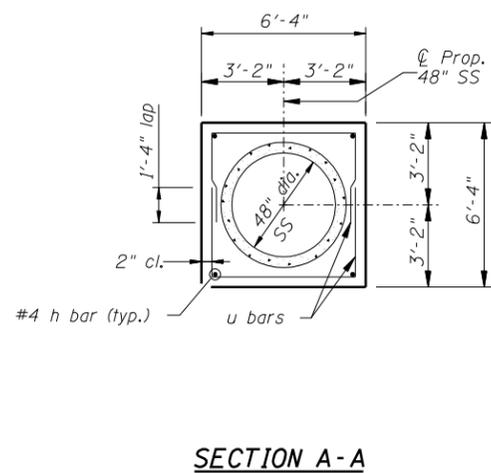
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Drawn By: RLP Checked By: TMM



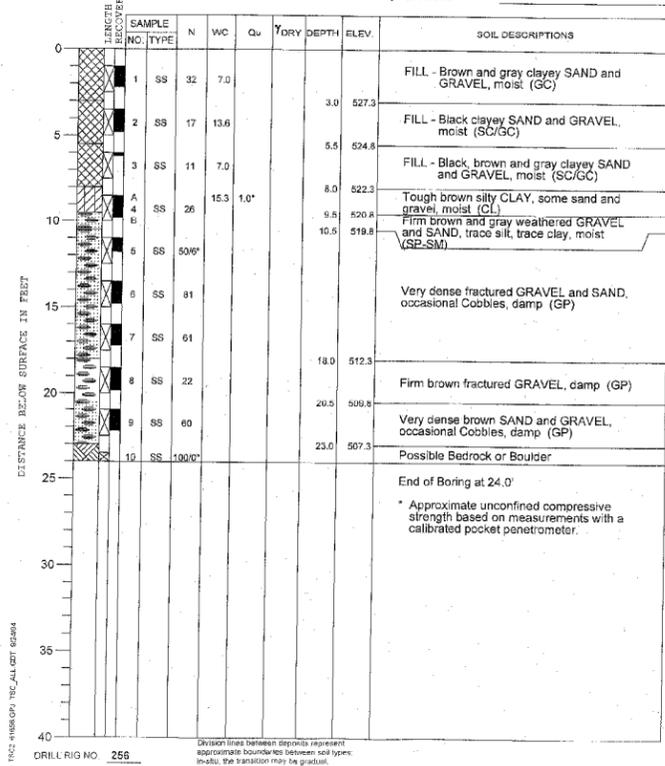
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
u	10	#4	13'-2"	U
h	4	#4	2'-8"	H

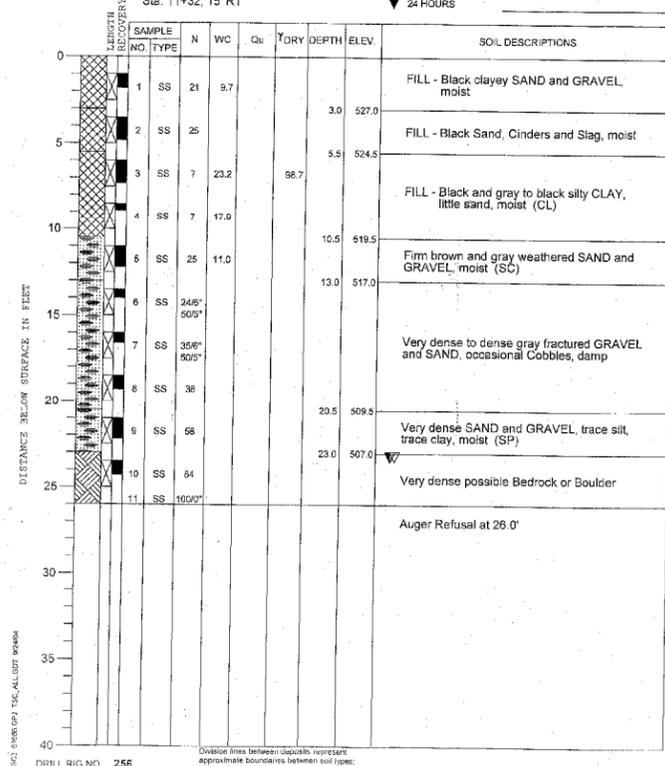
Reinforcement Bars	Pound	100
Sub-Base Granular Material, Type B	Ton	80
Portland Cement Concrete Base Course 9"	Sq Yd	324
Bituminous Materials (Prime Coat)	Gal	40
Bituminous Concrete Binder Course, Mixture B, Type 2	Ton	34
Bituminous Concrete Surface Course, Mixture D, Class I, Type 2	Ton	34
Pavement Removal	Sq Yd	424
Combination Curb and Gutter Removal	Foot	122
Concrete Collar	Cu Yd	2.4
Combination Concrete Curb and Gutter, Type B-6.24	Foot	122



PROJECT Rockdale Drainage Repairs, IL Route 5 & Brandon Road, Rockdale, Illinois  
CLIENT IDNR, Springfield, Illinois  
BORING 1 DATE STARTED 9-22-04 DATE COMPLETED 9-22-04 JOB L-61,856  
ELEVATIONS WATER LEVEL OBSERVATIONS  
GROUND SURFACE 530.3 WHILE DRILLING Dry  
END OF BORING 506.3 AT END OF BORING Dry  
Sta. 9+00, 15' RT  
24 HOURS



PROJECT Rockdale Drainage Repairs, IL Route 6 & Brandon Road, Rockdale, Illinois  
CLIENT IDNR, Springfield, Illinois  
BORING 2 DATE STARTED 9-22-04 DATE COMPLETED 9-22-04 JOB L-61,856  
ELEVATIONS WATER LEVEL OBSERVATIONS  
GROUND SURFACE 530.0 WHILE DRILLING 23.5'  
END OF BORING 504.0 AT END OF BORING 23.5'  
Sta. 11+32, 15' RT  
24 HOURS



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Designed By RLP Checked By TMM  
Drawn By RLP Checked By TMM  
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